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RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/846,091

DATE: 03/19/2002
 TIME: 14:53:33

Input Set : N:\Crf3\RULE60\09846091.raw
 Output Set: N:\CRF3\03192002\I846091.raw

1 <110> APPLICANT: HAYNES, Joel R.
 2 MACKLIN, Michael D.
 3 PAYNE, Lendon G.
 4 <120> TITLE OF INVENTION: NUCLEIC ACID IMMUNIZATION
 5 <130> FILE REFERENCE: APF40
 7 <140> CURRENT APPLICATION NUMBER: 09/846,091
 8 <141> CURRENT FILING DATE: 2001-04-30
 10 <150> PRIOR APPLICATION NUMBER: US/09/561,951
 11 <151> PRIOR FILING DATE: 2000-05-01
 13 <160> NUMBER OF SEQ ID NOS: 11
 14 <170> SOFTWARE: PatentIn Ver. 2.1
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 24
 18 <212> TYPE: PRT
 19 <213> ORGANISM: Influenza A virus
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 23 Cys Arg Cys Asn Gly Ser Ser Asp
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 27 <211> LENGTH: 24
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 47 <211> LENGTH: 20
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Artificial Sequence
 50 <220> FEATURE:

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78 <211> LENGTH: 28
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
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102 <213> ORGANISM: Influenza A/Kagoshima/10/95(H3N2)
103 <220> FEATURE:
104 <221> NAME/KEY: CDS

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109   1           5           10           15
110   tgc aga tgc aac ggt tca agt gac ccg ctt gtt gtt gct gcg agt atc   96
111   Cys Arg Cys Asn Gly Ser Ser Asp Pro Leu Val Val Ala Ala Ser Ile
112   20           25           30
113   att ggg atc ttg cac ttg ata ttg tgg att ttt gat cgt ctt ttt ttc   144
114   Ile Gly Ile Leu His Leu Ile Leu Trp Ile Phe Asp Arg Leu Phe Phe
115   35           40           45
116   aaa tgc atc tat cga ctc ttc aaa tac ggt ctg aaa aga ggg cct tct   192
117   Lys Cys Ile Tyr Arg Leu Phe Lys Tyr Gly Leu Lys Arg Gly Pro Ser
118   50           55           60
119   acg gaa gga gta cct gag tct atg agg gaa gaa tat cga aag gaa cag   240
120   Thr Glu Gly Val Pro Glu Ser Met Arg Glu Glu Tyr Arg Lys Glu Gln
121   65           70           75           80
122   cag aat gct gtg gat gct gac gac agt cat ttt gtc agc ata gag ctg   288
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124   85           90           95
125   gag taa   294
126   Glu
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130 <212> TYPE: PRT
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135   Cys Arg Cys Asn Gly Ser Ser Asp Pro Leu Val Val Ala Ala Ser Ile
136   20           25           30
137   Ile Gly Ile Leu His Leu Ile Leu Trp Ile Phe Asp Arg Leu Phe Phe
138   35           40           45
139   Lys Cys Ile Tyr Arg Leu Phe Lys Tyr Gly Leu Lys Arg Gly Pro Ser
140   50           55           60
141   Thr Glu Gly Val Pro Glu Ser Met Arg Glu Glu Tyr Arg Lys Glu Gln
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144   85           90           95
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148 <211> LENGTH: 4622
149 <212> TYPE: DNA
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154   taggtggacc agttggtgat tttgaacttt tgctttgccg cggaacggtc tgcgttgctg 180
155   ggaagatgcg tgatctgatc cttcaactca gcaaaagtgc gatttattca acaaagccgc 240

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156  cgccccgtca agtcagcgta atgctctgcc agtggtacaa ccaattaacc aattctgatt 300
157  agaaaaactc atcgagcatc aaatgaaact gcaattttatt catatcagga ttatcaatac 360
158  catatTTTTg aaaaagccgt ttctgtaatg aaggagaaaa ctcccgagg cagttccata 420
159  ggatggcaag atcctgggtat cggctctgcga ttccgactcg tccaacatca atacaaccta 480
160  ttaatttccc ctctgcaaaa ataaggttat caagtgagaa atcaccatga gtgacgactg 540
161  aatccggtga gaatggcaaa agcttatgca tttctttcca gacttggtca acaggccagc 600
162  cattacgctc gtcatacaaaa tcaactcgcat caaccaaacc gttattcatt cgtgattgcg 660
163  cctgagcgag acgaaatacg cgatcgctgt taaaaggaca attacaaaca ggaatcgaat 720
164  gcaaccggcg caggaacact gccagcgcat caacaatatt ttcacctgaa tcaggatatt 780
165  cttctaatac ctggaatgct gttttcccg ggatecgagt ggtgagtaac catgcatcat 840
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170  tcgagcaaga cgtttcccg tgaatatggc tcataacacc ccttgattta ctgtttatgt 1140
171  aagcagacag ttttattggt catgatgata tttttttatc ttgtgcaatg taacatcaga 1200
172  gattttgaga cacaacgtgg ctttcccccc cccccggca tgctgcagg tcgacataaa 1260
173  tcaatattgg ctattggcca ttgcatacgt tgtatctata tcataatatg tacatttata 1320
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207   ccatggagaa acccagatct acgtatgac agcctcgact gtgccttcta gttgccagcc 3360
208   atctgttggt tgccoctccc ccgtgccttc cttgaccctg gaaggtgcc a cccccactgt 3420
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